

NYISO Consumer Interest Liaison Weekly Summary

May 21 – May 25, 2018

Notices:

- As requested at the May 21, 2018 IPPTF meeting, the *NYSERDA statement and revised IPPTF schedule* have been posted at the following link. [Material](#)
- The NYISO's Market Training Team is bringing the in-class, MT-201 [New York Market Orientation Course \(NYMOC\)](#) to White Plains, New York in September. Registration deadline is close of business on Wednesday, September 5, 2018. The MT-201 [NYMOC](#) is recommended for those with minimal to moderate New York wholesale energy market industry experience.
September 18 - September 21, 2018
 - 8:30 AM to 4:30 PM Tuesday through Thursday and 8:30-12:00 PM on Friday
 - Crowne Plaza White Plains - Downtown, 66 Hale Avenue, White Plains, NY

Meeting Summaries:

Monday, May 21, 2018

Integrating Public Policy Task Force

Issue Track 4: Interaction with Other State Policies and Programs

Christopher Hall of the New York State Energy Research and Development Authority (NYSERDA) read the following statement for stakeholder clarification of NYSERDA contracts:

“Some stakeholders have voiced concerns over what they characterize as potential future “overpayment” to renewable generators for the value of avoided carbon emissions associated with their generation. In this case, some have used the term “overpayment” to refer to the possible payment of both NYSERDA RECs (which were priced before a NYISO carbon charge was in place) and the net-cost of carbon that may be internalized in a future NYISO carbon charge regime.

For the existing RPS contracts and contracts from the first CES solicitation:

- *NYSERDA has current commitments to pay an average of approximately \$100 million in REC payments per year from 2022 through 2041.*
- *The peak annual aggregate NYSERDA payment is approximately \$138 million in 2022.*
- *NYSERDA would not characterize these figures as estimates of “overpayments” even in the case of a carbon charge regime. These commitments were based on winning*

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competitive bids, for which bidders made their own forecasts of future market prices (including RGGI impacts). Further, the question of the interaction between existing state policies and a future carbon charge system will need to be considered and aligned and it is still unclear what precise impact any carbon pricing proposal will have on REC prices bid into future NYSERDA solicitations.”

Alan Michaels of the Department of Public Service (DPS) continued the presentation with a summary of questions and concerns received from stakeholders that will require resolution. Mr. Michaels noted that several of the questions raised had been addressed in the Brattle Report in 2017, providing an initial framework for continued discussion. Stakeholders provided additional areas of concern on subjects such as interaction with the Regional Greenhouse Gas Initiative (RGGI) and Zero Emission Credits (ZECs) that will need to be addressed in this process. Comments are encouraged and can be sent to IPPTF_Feedback@nyiso.com. To see materials from the presentation, please go to: http://www.nyiso.com/public/committees/documents.jsp?com=bic_miwg_ipptf&directory=2018-05-21

Issue Track 2: Applicable New York Wholesale Electricity Supplier Emissions

Dr. Nathaniel Gilbraith of the NYISO presented an outline of the emissions that could be subject to the carbon charge if a carbon dioxide pricing proposal is adopted. Dr. Gilbraith explained that an important principle for the process is that the subject emissions should be reasonably transparent and predictable. The NYISO proposal is applicable to “Burner tip” CO₂, which is directly attributable to providing wholesale energy and ancillary services. The emission calculations would be self-reported to the NYISO by the supplier, based on a rolled-up weekly value, and subject to a true-up with data received from a qualified external database. Fossil fuel resources have this information readily available as they currently report CO₂ emissions data to the Environmental Protection Agency (EPA) and the Energy Information Administration (EIA). A generic example was provided to illustrate the generation emission cost calculation.

The NYISO is seeking input from stakeholders to assist the development of a policy for cogeneration emissions data in order to allocate emissions to electric and steam generation.

Behind-the-Meter:Net Generation (BTM:NG) resources would only consider emissions associated with providing wholesale energy and ancillary services for the carbon charge, consistent with the generation resource type.

Zero-emission resources, biomass, biogas, liquid biofuel and associated resources, that are identified in New York State policies, would not be assessed a carbon charge.

Pumped hydro resources would not be assessed a carbon charge for their injections into the wholesale grid, but would pay the carbon charge through LBMP pricing for all withdrawals.

Dr. Gilbraith noted that Distributed Energy Resources (DER) would be assessed a carbon charge based on the generation resource type for all wholesale electricity injections.

A stakeholder noted that special care should be taken by the NYISO when developing reference prices during the transition period between no carbon charge and assessing a carbon charge.

The NYISO encourages stakeholder input and has provided a specific email address for this process at: IPP_Feedback@nyiso.com. To see the complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_miwg_ipptf/meeting_materials/2018-05-21/IPPTF_IT2%20applicable%20carbon%20emissions-%20FOR%20POSTING%2020180521.pdf

Stakeholder Panel Discussion on Emissions Reporting

A panel was assembled to discuss generator emissions reporting. The panel consisted of:

- **Cathy Waxman – National Grid**

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- **Andy Oliver – Eastern Generation**
- **Vince Dodge -- Dynegy**

The panel members gave a brief explanation of the emissions reporting process. They explained that the data is reported to the EPA and EIA quarterly, based on hourly emissions data. The emissions data is recalculated by the government agencies for verification and held to a tight tolerance. The panel fielded questions from stakeholders to help add clarification to this complicated process.

Issue Track 5: Consumer Impact Analysis: Proposed Assumption Framework

Timothy Duffy of the NYISO provided the assumption framework for the consumer impact analysis on the proposed implementation of a carbon dioxide charge in the wholesale electricity markets. The study framework under consideration proposes to:

- *Utilize the 2017 CARIS 1 “System Resource Shift” case as starting point*
- *Capture material updates (as available) for three study years (2020, 2025, 2030)*
- *Adjust renewable build-out to meet interim targets and “50 x 30” in 2030*
- *Implement alternative assumptions for renewable build-outs and nuclear unit retirements in three scenarios*
 - *Scenario A – CARIS Model*
 - *Scenario B – Off-Shore Wind*
 - *Scenario C – Upstate Nuclear*

Mr. Duffy provided a timeline of the major changes that will be incorporated in the analysis and noted that although the changes are scheduled throughout the process, the analysis years will consist of 2020, 2025 and 2030. Transmission updates for the NYCA were identified and placed on a timeline. Other assumptions noted by Mr. Duffy and discussed with stakeholders included:

- Emission Allowance Price Forecasts
- Fuel Price Forecasts
- NYCA Resource Changes
- Anticipated Large Scale Renewable Projects (including location and timing)
- External Region and Transaction Modeling

Stakeholders suggested interest in several scenarios, or sensitivities (high/low gas prices, high/low load, etc.) that may affect consumer costs. It was also noted that stakeholders want all price data along with the deltas between the base case and the scenarios.

The NYISO encourages stakeholder feedback to help determine input on the variabilities that will best reflect an impact to consumers. Comments can be sent to IPP_Feedback@nyiso.com. To see the complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_miwg_ipptf/meeting_materials/2018-05-21/IPPTF_IT5_0521_FOR%20POSTING.pdf

Tuesday, May 22, 2018

Joint Electric System Planning Working Group/Transmission Planning Advisory Subcommittee Comprehensive System Planning Process Review

Yachi Lin of the NYISO presented the draft schedule for the Comprehensive System Planning Process (CSPP) review. Ms. Lin recalled an earlier presentation where it was explained that the CSPP was under review for some changes that could be implemented in a short period of time as well as more complex changes that would take longer to resolve. Stakeholders have provided comments to the proposal and, as a result the NYISO adjusted the timeline for development.

April, May and June 2018 will allow time for stakeholder discussion and comment. Although written comments are preferred, Ms. Lin assured market participants that verbal comments are given equal

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consideration in all discussions. A straw proposal to include cost containment in the Public Policy Transmission Planning Process (PPTPP) will be presented in the summer 2018 time frame with a finalized draft proposal scheduled for August 2018, along with other tariff revisions. The NYISO will seek governance and Board of Directors approval for these tariff revisions in the September/October time frame. A goal of the process is to have a completed cost containment proposal in place prior to the next PPTPN solution solicitation.

The topics of concern for the longer-term changes are currently being discussed internally at the NYISO. In Q2/Q3 2018, the conceptual CSPP design considerations will be provided and discussed with stakeholders. These concepts will be discussed and refined throughout 2018 with BIC, OC and MC discussions scheduled for late Q4. Tariff language discussions and governance action will continue into the following year resulting in a tariff filing to FERC in 2019.

In response to a stakeholder suggestion that it may be more effective to devote separate ESPWG/TPAS meetings to specific topics due to the complexity of the issues, the NYISO agreed to consider the idea for future discussions.

Comments are encouraged and can be sent to lbullock@nyiso.com. To see the complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_espwg/meeting_materials/2018-05-22/CSPP_timeline.pdf

AC Transmission PPTN: Updates

Dawei Fan provided updates to the AC Transmission Public Policy Transmission Need process. Several stakeholder comments have been received as of May 14, 2018 and have been posted to the NYISO web site. Mr. Fan led a review of comments and questions while providing the opportunity for stakeholder discussion on each issue. The NYISO consultant assisting in the evaluation process, SECO, was available to stakeholders to provide detailed clarifications of the evaluation process. A timeline was provided to illustrate where the NYISO currently is in the process. The draft AC Transmission Public Policy Transmission Planning Report, with ranking and selection recommendations, is scheduled for a June 1, 2018 review with ESPWG stakeholders. The NYISO encourages additional comments which can be sent to PublicPolicyPlanningMailbox@nyiso.com. To see the complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_espwg/meeting_materials/2018-05-22/AC_Transmission_PPTN.pdf

Wednesday, May 23, 2018

Joint Market Issues/Installed Capacity Working Group

Market Design Concepts to Prepare for Significant Renewable Generation: Reserve Procurement for Resilience

Ethan Avallone of the NYISO presented a proposal exploring the benefits of procuring additional operating reserves to incent resource performance and promote grid resilience. Mr. Avallone posited that these reserve schedules would enhance grid resilience by recognizing the value of resource availability to be responsive to unanticipated real-time operating needs. The reserve requirements could be increased in response to certain operational conditions that would assist in smoothing pricing volatility anticipated with the increased renewable resources. Mr. Avallone provided questions for stakeholder discussion concerning:

- *How many additional MW of reserve should be procured?*
- *Where should the additional reserves be procured?*
- *When should the additional reserves be procured?*

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- *What shortage pricing levels should be used for the reserve demand curves?*

In response to a stakeholder question, Mr. Avallone explained that locational attributes would be incorporated into this product requirement. It was also explained that providing resources with a reserve schedule incents those resources to take additional steps to prepare for conversion from reserve to energy.

During the ensuing discussion, stakeholders provided feedback on issues that should be considered in this process such as providing incentives for resources to perform when called upon. Another consideration from stakeholders was the importance of defining the resilience attributes that the additional reserves would be addressing.

An example was provided to illustrate the application of the proposed reserve demand curve.

The NYISO will continue to consider feedback for the development of this proposal and will present the Master Plan on June 13, 2018. To see the complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_icapwg/meeting_materials/2018-05-23/Reserve%20Procurement%20for%20Resilience%20May%20MIWG%20FINAL.pdf

ESR Participation Model: Settlements

Daniel Noriega of the NYISO presented additional proposals for Energy Storage Resource (ESR) settlement rules. Mr. Noriega began his presentation with a review of prior presentations going back to 2016 on the development of the ESR participation model. Links to past presentations were provided for reference. The NYISO is working to keep this settlement framework consistent with that currently used for generators, with additional considerations to fully account for ESRs' withdrawal capabilities and Energy Level constraints in the settlements logic.

Mr. Noriega provided detail on three additional settlement topics for stakeholder feedback:

1. Provisions for Over/Under - Withdrawals
2. Bid Production Cost Guarantee (BPCG)
3. Regulation-Specific Charges and Payments
 - a. Regulation Revenue Adjustment Payment (RRAP)
 - b. Regulation Revenue Adjustment Charge (RRAC)

Mr. Noriega noted stakeholder input for consideration in the model.

A timeline was provided reflecting the order of design considerations to be discussed through August 2018 leading to proposed tariff updates in late summer. This effort will result in a compliance filing in late 2018. To see Mr. Noriega's complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_icapwg/meeting_materials/2018-05-23/Energy%20Storage%20I%20O.pdf

Capacity Market Rules for Energy Storage Resources

Zachary T. Smith of the NYISO presented the proposed market rules for participation of Energy Storage Resources (ESRs) in the Capacity Market. This effort coordinated with the development of the ESR Participation Model referenced in FERC Order 841. Mr. Smith noted that this initial discussion is limited to rules for individual, directly metered Energy Storage Resources that participate only in the NYISO's wholesale markets ("in front of the meter").

The NYISO proposes that to qualify for participation in the Capacity Market, an ESR will be required to meet the existing 4-hour minimum run time requirement. An example was provided to illustrate how this could be evaluated. It was noted that modifications to the minimum run-time duration, as well as partial capacity payments for resources that are unable to meet the minimum run-time duration, are being evaluated as part of the Distributed Energy Resource (DER) Participation Model. Mr. Smith noted feedback supporting and opposing this requirement from stakeholders which will be considered

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as the proposal moves forward. The NYISO is working to refine a proposal that balances the need for comparable treatment while avoiding unnecessary barriers to resource participation.

In addressing mitigation of ESR resources, Mr. Smith explained that ESRs in Mitigated Capacity Zones must be evaluated under the Buyer Side Mitigation (BSM) Rules to determine if they are eligible for an exemption of their Offer Floor. All ESRs would remain eligible to apply for existing BSM exemptions based on resource type. Mr. Smith noted a wide range of comments for consideration in a final BSM proposal.

Mr. Smith next led a discussion on potential requirements for DMNC testing of ESRs. The proposal would require a 4-hour DMNC, consistent with existing rules. DMNC test length rules may need to be revised depending on the DER Participation Model's rules on the minimum run-time duration and partial capacity payments for resources that do not meet the duration requirements. Stakeholders responded with a range of suggestions for the NYISO to consider.

Other considerations to consider for completing the ICAP market participation model that were discussed include:

- *Requirements for outage reporting*
- *Bid/Schedule/Notify Requirements*
- *NYISO SRE Response*
- *State of Charge Telemetry*
- *Energy Level Monitoring Program (Would be required for ICAP eligibility in ESRs)*
- *Penalty Structure*

The NYISO is encouraging stakeholder input throughout the development of the ESR ICAP market participation model which can be sent to: deckels@nyiso.com or ztsmith@nyiso.com. To see the complete presentation, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_icapwg/meeting_materials/2018-05-23/Initial%20ESR%20Capacity%20Model.pdf

Highlights of the 2017 State of the Market Report NYISO Markets

Pallas LeeVanSchaick of Potomac Economics (MMU) presented highlights of the 2017 State of the Market (SOM) report for the NYISO markets. This presentation concentrated on the Capacity Market outcomes. Mr. LeeVanSchaick provided several tables and charts to illustrate various market outcomes such as:

- *Capacity Market Results and Drivers*
- *ICAP by Region and Prime Mover*
- *Investment Signals*

The analysis of the data results in recommendations for market refinements in areas including market pricing, transmission incentives and planning enhancements and enhancing performance incentives.

To see the complete presentation including the full list of 2017 recommendations, please go to:

http://www.nyiso.com/public/webdocs/markets_operations/committees/bic_icapwg/meeting_materials/2018-05-23/2017%20NYISO%20SOM%20Report%20Presentation_for%20ICAPWG_5-18-2018.pdf

FERC Filings

May 23, 2018

Proposed tariff revisions concerning NYISO's Generator Deactivation Process to comply with the directives of an April 2018 Order

May 22, 2018

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NYISO filing of post technical conference comments regarding reform of affected system coordination in the generator interconnection process

May 21, 2018

NYISO request for clarification, and in the alternative rehearing, of the independent entity variation of surplus interconnection service requirements in Order No. 845

May 22, 2018

NYISO filing of proposed tariff revisions to establish External to Rest of State Deliverability Rights.

FERC Orders

There were no FERC Orders issue to NYISO for this week

Filings and Orders:

http://www.nyiso.com/public/markets_operations/documents/tariffviewer/index.jsp